

Requesting an Exception to Change to Chloramines: What to Submit to TCEQ

Changing from free chlorine to chloramines requires the water system to obtain an exception prior to making the change as specified in 30 TAC §290.42(e)(3)(G). An exception to this rule may be requested by providing the following information to:

TCEQ Technical Review & Oversight Team (MC 159)
P.O. Box 13087
Austin, Texas 78711-3087

- Documentation that the ammonia to be used is ANSI/NSF Standard 60 certified.
- Specifications (including model number and feed rate) for the ammonia pump(s).
- A description of the spill containment for the ammonia storage container(s), which must be able to hold at least 110% of the container's contents.
- A schematic or drawing of the water system, including current and proposed chlorine and ammonia injection point locations, water sources, storage tanks, etc. Include whether you propose to change the type of chlorine used (i.e. liquid to gaseous).
- Documentation showing that the PWS has the ability to test for free ammonia, monochloramines, chloramine (total chlorine), and free chlorine. We will notify you of the testing frequency in our exception letter.
- You must notify your customers, both retail and wholesale, that you plan to convert to a chloramine disinfectant at least 14 days prior to making the change. This notification must contain the Sample Language for Notification Upon Changing from Free Chlorine to Chloramines included below. The notification should be provided to the news media, renal disease facilities, dialysis clinics, hospitals, physicians, local health departments, etc. Please insure that any water system that purchases water from your system also receives this notice and understand that their customers must also receive this notice. This is vital information for your wholesale purchasers and can affect the type and quantity of disinfectant that the purchased water system will need to utilize.

Sample Language for Notification Upon Changing from Free Chlorine to Chloramines

On [Date], the [water system name] will be changing the disinfectant that we use from chlorine to chloramines. This change is intended to benefit our customers by reducing the levels of disinfection byproducts (DBPs) in the system, while still providing protection from waterborne disease.

However, the change to chloramines can cause problems to persons dependent on dialysis machines. A condition known as hemolytic anemia can occur if the disinfectant is not completely removed from the water that is used for the dialysate. Consequently, the pretreatment scheme used for the dialysis units must include some means, such as a charcoal filter, for removing the chloramine prior to this date. Medical facilities should also determine if additional precautions are required for other medical equipment.

In addition, chloraminated water may be toxic to fish. If you have a fish tank, please make sure that the chemicals or filters that you are using are designed for use in water that has been treated with chloramines. You may also need to change the type of filter that you use for the fish tank.

- Engineering plans and specifications must be submitted to the TCEQ's Utilities Technical Review Team (MC 159) for review and receive approval to construct prior to construction beginning as specified in 30 TAC §290.39(j)(1)(A) if any of the following cannot be met:
 - The type of ammonia used will be liquid ammonium sulfate (LAS)
 - The LAS will be stored in 55 gallon drums or smaller
 - The plant's 15-day supply of LAS is 110 gallons or less
- If the request is for a surface water treatment plant (SWTP) or groundwater under the influence of surface water (GUI) plant, a revised CT study must be requested and approved prior to the change in the disinfection protocol as specified in 30 TAC §290.39(j).